

On page 25, line 9, before "present invention", please insert -- illustrated embodiment of the --.

On page 26, line 24, please delete "syringes" and substitute therefor -- pumps --; after "aspirate", please insert a comma ",", and delete "and/or"; and after "inject", please insert -- or otherwise pump --.

In the Claims:

Please cancel claims 1-26, and add the following new claims:

27. (New) A method for making a plurality of different reagent mixtures and analyzing particle distributions of the reagent mixtures, wherein each reagent mixture corresponds to a respective operator input, and the method is performed with an apparatus having at least one pump, a sensing unit defining a counting orifice for receiving a reagent mixture and analyzing a particle distribution of the reagent mixture, and a control unit responsive to each operator input to control the at least one pump and sensing unit to make a respective reagent mixture and analyze a particle distribution of the reagent mixture, the method comprising the following steps:

in response to each operator input, selecting one or more of a plurality of lysing agents corresponding to the respective operator input;

pumping with the at least one pump a predetermined volume of the at least one selected lysing agent corresponding to the respective operator input;

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pumping with the at least one pump a predetermined volume of at least one other reagent-mixture component corresponding to the respective operator input;

intermixing the predetermined volumes of the at least one lysing agent and the at least one other reagent-mixture component, and in turn creating a reagent mixture corresponding to the respective operator input; and

introducing the reagent mixture through the counting orifice of the sensing unit and sensing a particle distribution of the reagent mixture.

28. (New) A method as defined in claim 27, wherein the reagent-mixture components of a plurality of the different reagent mixtures include (i) blood and (ii) at least one lysing agent, and the method comprises the steps of:

in response to each of a plurality of different operator inputs, selecting the ratio of blood to the at least one lysing agent in the corresponding reagent mixture;

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pumping with the at least one pump a predetermined volume of the at least one selected lysing agent corresponding to the respective blood/lysing agent ratio;

pumping with the at least one pump a predetermined volume of blood corresponding to the respective blood/lysing agent ratio; and

intermixing the predetermined volumes of blood and the least one lysing agent, and in turn creating a reagent mixture corresponding to the respective operator input.

29. (New) A method as defined in claim 28, comprising the steps of:

in response to each of a plurality of operator inputs, selecting the ratio of blood to at least one first lysing agent and at least one second lysing agent in the respective reagent mixture;

pumping with the at least one pump a predetermined volume of the at least one first lysing agent corresponding to the respective blood/lysing agent ratio;

pumping with the at least one pump a predetermined volume of the at least one second lysing agent corresponding to the respective blood/lysing agent ratio;

pumping with the at least one pump a predetermined volume of blood corresponding to the respective blood/lysing agent ratio; and

intermixing the predetermined volumes of blood and the first and second lysing agents, and in turn creating a reagent mixture corresponding to the respective operator input.

30. (New) A method as defined in claim 27, further comprising the steps of:

providing a database comprising data indicative of (i) a plurality of animal species, and (ii) a plurality of different reagent mixtures and the predetermined volumes of the reagent-mixture components of each reagent mixture, wherein each reagent

mixture corresponds to one or more of the plurality of animal species;

in response to each operator input corresponding to a respective one of the plurality of animal species, selecting one of the plurality of reagent mixtures corresponding to the respective animal species; and

pumping with the at least one pump the predetermined volumes of the reagent-mixture components, and in turn creating the reagent mixture corresponding to the respective animal species.

31. ~~(New)~~ A method as defined in claim 30, wherein the at least one other reagent-mixture component is blood.

32. ~~(New)~~ A method as defined in claim 30, wherein the at least one other reagent-mixture component includes (i) a predetermined volume of blood, and (ii) a predetermined volume of diluent.

33. (New) A method as defined in claim 30, wherein the reagent-mixture components of the plurality of reagent mixtures are selected from the group including: (i) a blood sample of each of a plurality of different animal species, (ii) diluent, (iii) a first lysing agent, and (iv) a second lysing agent.

34. (New) A method as defined in claim 27, further comprising the steps of:

intermixing the predetermined/volumes of the at least one lysing agent and the at least one other reagent-mixture component in a mixing chamber, and in turn creating the reagent mixture in the mixing chamber; and

pumping the reagent mixture from the mixture chamber into the sensing unit for sensing the particle distribution of the reagent mixture.

35. (New) An apparatus for making a plurality of reagent mixtures and analyzing particle distributions of the reagent mixtures, comprising:

at least one pump;

a sensing unit defining a counting orifice for receiving a reagent mixture and analyzing a particle distribution of the reagent mixture; and

means for selecting the ratio of blood to at least one lysing agent for creating a plurality of different reagent mixtures, each corresponding to a different operator input, and for controlling the at least one pump in response to each operator input to pump predetermined volumes of blood and at least one lysing agent in accordance with the blood/lysing agent ratio corresponding to the respective operator input, said means further controlling the at least one pump to

(i) intermix the predetermined volumes of blood and at least one lysing agent and thereby create the reagent mixture corresponding to the respective operator input, and